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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 09/610,116  | 06/30/2000  | Ben Speiser          | FORE-65                      | 4695             |
| 7590  |             | 09/28/2004           |                              |                  |
| Ansel M Schwartz<br>One Sterling Plaza<br>201 N Craig Street<br>Suite 304<br>Pittsburgh, PA 15213 |             |                      | EXAMINER<br>KADING, JOSHUA A |                  |
|   |             |                      | ART UNIT                     | PAPER NUMBER     |
|   |             |                      | 2661                         |                  |
| DATE MAILED: 09/28/2004   |             |                      |                              |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/610,116

Applicant(s)

SPEISER ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 12 is/are rejected.
- 7) ☒ Claim(s) 4-11, 13 and 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach et al. (U.S. Patent 6,028,860) in view of Lentz et al. (U.S. Patent 5,440,752).

In regard to claim 1, Laubach discloses "a switch comprising:

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a port card (figure 3, elements 311);

a network connected to the port card, the network having transmitters and receivers that communicate with each other and have assignments between each other (figure 3 where each port card is connected to an Ethernet network and it is further inherent that a network have transmitters and receivers in it that have assignments between them, if they didn't how would data get from one point to another?);

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a fabric connected to the port card through the network to send and receive stripes of fragments of packets to or from the port card, the port card, fabric and network having a plurality of modes of operation (figure 3 where the "common ATM switch" constitutes a fabric connected to the port card; the port card, as seen in figure 4, creates the "stripes of fragments of packets" in element 402 as read in col. 8, lines 53-55; the "stripes of fragments of packets" are then sent to the "common ATM switch" of figure 3

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which is then capable of sending and receiving "stripes of fragments of packets"; it should be noted that two modes of operation could be sending and receiving)..."

However, Laubach lacks what Lentz discloses, "a control mechanism connected to the transmitters and receivers which changes the assignments according to the mode, the control mechanism changing the mode and reusing the transmitters and receivers where they can be reused (figure 2, elements 71a, 70a, PAU<sub>0</sub> where PAU<sub>0</sub> is the control mechanism that operates to change the assignments according to the different modes, see col. 8, lines 39-44)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the control mechanism for the purpose of controlling the input and output ports of the fabric (Lentz, col. 8, lines 39-44). The motivation for controlling the ports is to avoid contention for the ports by arbitration, avoiding contention decreases data loss.

Although claim 12 is a method claim, certain limitations of claim 12 are identical to those in claim 1 by the mere fact that the parts of the apparatus of claim 1 have functions and these functions are similar to the limitations of claim 12. Therefore, the corresponding limitations of claim 12, similar to those in claim 1 are rejected for the same reasons as those in claim 1.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach et al. and Lentz et al., as applied to claim 1 above and in further view of Heddes et al. (U.S. Patent 5,311,509).

5           In regard to claim 2, Laubach and Lentz disclose the switch of claim 1. However, Laubach and Lentz lack what Heddes discloses, "the network is a gigabit network, the transmitters are gigabit transmitters and the receivers are gigabit receivers (col. 3, line 33 where it is implied by the "1,2/2,4 Gb/sec" that the network, including transmitters and receivers, constitute a gigabit network)." It would have been obvious to one with  
10       ordinary skill in the art to combine the gigabit network of Heddes et al. with the switch of Lentz et al. The motivation being to have a faster network.

          In regard to claim 3, Laubach and Lentz disclose the switch of claim 2. However, Laubach and Lentz lack what Heddes discloses, "the network includes a mux structure  
15       that makes the assignments between transmitters and receivers (figure 1, elements 11, 12.1, 13.1 where element 11 is taken to be a mux structure that is creating assignments between the transmitter (e.g. 12.1) and the receiver (e.g. 13.1))." It would have been obvious to one with ordinary skill in the art to include the mux structure of Heddes et al. to the switch of Lentz et al. for the same reasons and motivation as in claim 2.

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***Allowable Subject Matter***

Claims 4-11, 13, and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

Applicant's arguments, see Remarks, page 7, paragraph 1, filed 14 June 2004, with respect to the objection to the drawings have been fully considered and are persuasive. The objection to the drawings has been withdrawn.

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Applicant's arguments, see Remarks, page 8, paragraph 2, lines 4-5, filed 14 June 2004, with respect to the rejection(s) of claim(s) 1-11 under 35 U.S.C. 112 first paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicant's described meaning of "stripes of fragments".

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It should also be noted that for the art rejections above, "stripes of fragments of packets" is taken to mean fragments of packets, this is because, as per applicant's response to the previous Office Action, the applicant describes "stripes of fragments" as "*data from packets*" as "*fragmented and sent as stripes*" on page 8, second paragraph, lines 4-5 of the Remarks filed 14 June 2004. This strongly suggests that the fragments

20 and stripes are equivalent and there is no distinction between them. If stripes are different than fragments, applicant is pointed to MPEP 2106.II(C) for the requirements for the defining of terms.

Applicant's arguments, see Remarks, page 8, paragraph 2, lines 4-5, filed 14 June 2004, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 112 second paragraph have been fully considered and are persuasive. Therefore, the rejection has  
5 been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicant's described meaning of "stripes of fragments".

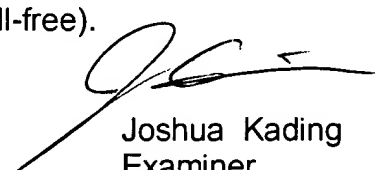
Applicant's arguments, see Remarks, page 10, paragraph 2, filed 14 June 2004, with respect to 35 U.S.C. 112 second paragraph rejections of claims 4 and 15 have  
10 been fully considered and are persuasive. The 35 U.S.C. 112 second paragraph rejection of claims 4 and 15 has been withdrawn.

Applicant's arguments, see Remarks, page 10, paragraph 3, filed 14 June 2004, with respect to the rejection(s) of claim(s) 12 under 35 U.S.C. 112 second paragraph  
15 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a better understanding of applicant's invention.

Any inquiry concerning this communication or earlier communications from the  
20 examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
10 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading  
Examiner  
Art Unit 2661

September 22, 2004



**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**

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